

OVERVIEW OF E-LIBRARY MANAGEMENT SYSTEM IN LIBRARIES, ITS PURPOSE AND BENEFITS

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LEARNING OBJECTIVES

At the end of the presentation, participants would be able to:

- Define the Term E-Library Management Systems;
- State the purpose of E-Library Management Systems;
- State the functions of E-Library Management Systems;
- Identify the different types of E-Library Management Systems; and
- Examine problems of managing E-Library Management Systems

Outline

- Introduction
- Definition of Relevant Concepts
- Types of E-Library Management Systems;
- Purpose and Functions of E-Library Management Systems;
- Challenges of E-Library Management System; and
- Advantages of E-Library Management Systems.

INTRODUCTION

- It is important to underscore the fact that E-Library Management Systems relates to those fundamental activities in library service which are aimed at ensuring operational efficiency.
- On a daily basis, information and data are generated, processed and preserved for future use. Information in library service is in written and soft copy form and is widely circulated.
- Information must, therefore, be carefully generated and efficiently managed, since they are sine qua non to the survival, nourishment and good decision-making process in life.

Definition of Relevant Concepts

- E- library system also known as a digital library is concerned with that body of knowledge relating to the collection, organization, storage, distribution, retrieval, and utilization of digital information.
- Library Management System is a computerized system which helps user (librarian) to manage the library daily activity in electronic format.
- It reduces the risk of paper work such as file lost, file damaged and time consuming. It can help user to manage the transaction or record more effectively and time-saving.
- Digital libraries basically store materials in electronic format and manipulate large collections of those materials effectively.
- Format of materials are a combination of text, imaging, sound, video, audio and animation.

E-Library Management System

- E-Library management system is a computerized system that maintain all the daily work of library. Its features are generally not available in normal library management systems like facility of user login and admin login through which the admin can monitor the whole system.
- It has also a facility where users after logging in their accounts can see list of available books.
- The librarian can also maintain the library in the best way possible and also reduce the human efforts by opening the user's access to resources.

Types of E-Library Management Systems

Kooba Library Management Software

- Kooba Library Management Software is a web based multi user easy to use, specifically designed and developed to simplify the Administration, Circulation and Acquisition of Books and Members of a School / College and public Library.

MyClassCampus

- MyClassCampus is a Mobile App and Web based tool for schools, colleges and private institutes to help them go digital. It works as an operating system which covers, online teaching, digital data management and communication part.

Types of E-Library Management Systems Contd.

EDUMAAT

- EDUMAAT is an enhanced ERP that automates the education sector that starts from student admission to graduation. An educational institute is a place where the management, the students, the parents and the faculty are identified as stakeholders.

Academics ERP

- Academics ERP is a unique and very comprehensive software for management of academic institutions like Primary and Secondary School, Degree, polytechnic, Engineering Institutes, management Institutes, Image of Custom Academics ERP Medical college, Coaching and other Educational institutes.

Types of E-Library Management Systems Contd.

CodeAchi Library Management System

- CodeAchi Library Management System is a complete solution for managing and administrating any size of Library. Our Research and development always keen to make the software most fast for the operations. Software is fully featured with Barcode, shelf management and more.

CampSteer

- CampSteer is A web-based state-of-the-art ERP product covering all aspects of operations and management of educational institutions. It helps to keep a track of all the campuses without the need for an additional software. It helps in improving operational effectiveness and bringing down administrative costs.

Types of E-Library Management Systems Contd.

Cybrarian

- Cybrarian is a web-based integrated library automation software. This is a truly integrated library automation software allowing small to big libraries to go online and to take the advantage of internet world.

Librarian

- Librarian is a next generation library management system designed for small to large libraries. Library manager software uses established thoughtfully created design and development principles. Digital library software showcases library's individual strengths, while freeing staff from routine functions.

Types of E-Library Management Systems Contd.

Libsys 10

- Libsys 10 is a Library Management System that enhances the library experience by automation and maintaining, organizing and handling of books systematically. It covers all the important functions of a library like Acquisition, Cataloguing, Circulation, Serials.

Major Library Components Covered Under E-Library Management Systems

a) Library Automation

- Library automation is the application of machines (e.g. computers) to carry out the library operation or activity.
- Library automation is important in providing more and very high speed information accession. It minimizes staff requirements, increases library use and facilitates handling of huge data or information.

Major Library Components Covered Under E-Library Management Systems Contd.

b) **Digital Library**

- The first use of the term digital library, in print, may have been in a 1988 report to the Corporation for National Research Initiatives. These draw heavily on “As We May Think” by Vannevar Bush in 1945, which set out a vision not in terms of technology, but user experience.
- The term “virtual library” was initially used inter-changeably with digital library.
- A distinction is often made between content that was created in a digital format, known as born digital, and information that has been converted from a physical medium, e.g. paper, by digitizing. The term “digital library” was first popularized by the National Science
- Foundation’s (NSF)

Major Library Components Covered Under E-Library Management Systems Contd.

c) Internet & Library Services

- Internet has become an important tool to transfer information and offers a variety of services to create, browse, access, search, communicate and views information.
- Internet also plays an important role to enhance library services in providing better information service.
- The information services based on Internet are:
 - e-journal,
 - e-book,
 - library catalogue,

Major Library Components Covered Under E-Library Management Systems Contd.

- technical reports,
- online databases,
- Web OPAC,
- e-mail based information services,
- online reference services,
- content page of journal,
- online bibliographic databases, etc. All these services provide useful information that can be accessed through online tools available over Internet.

Major Library Components Covered Under E-Library Management Systems Contd.

d) Resource Sharing

- *Areas of Resource Sharing:* The network should be able to access some areas over the
- Internet like online catalogue, indexes, cooperative procurement, co-operative technical
- operation, preparation of union catalogue, co-operative storage, browsing privilege of cooperative
- members, co-operative in documentation, exchange of experts, co-operative interlibrary
- loans, document delivery services, consortia purchasing, and collection development
- etc.

Major Library Components Covered Under E-Library Management Systems Contd.

Objectives of Resource Sharing & Networking:

- The main objectives of library resource sharing and networking are:
- □ Exchanging library resources and information materials that are not available in each others library.
- □ To facilitates the maximum utilization of resources.
- □ To avoid duplication in resources.
- □ To make overall improvement of library services.
- □ To provide better library services with less budget and to save the time of user in resource search.
- □ To develop sharing policies for inter library loan and reciprocal agreements for special collections.

Objectives of Resource Sharing & Networking Contd.

- Nowadays the cost of reading materials is increasing day by day and so libraries are facing difficulties in acquiring adequate collections.
- The publication duration of print materials take a long time and print materials may not be relevant enough when compared with soft copy which is available on the Web.
- The soft copy can be accessed rapidly on the Web at anywhere and then the emphasis is now shifting hard copy to soft copy to provide immediate information service.
- Therefore, library resource sharing and networking is very important in present ICT era.

Impact of E-Library Management Systems on Libraries

E-Library Management Systems has wider implication for librarians. These include:

a) Library Management

- Under this we have classification, cataloguing, indexing, database creation, Current Awareness Service and Selective Dissemination of Information.

b) Library Automation

- Under this we have organization of databases, automation library and various house-keeping operations affected by use of ICT.

Impact of E-Library Management Systems on Libraries

c) Library Networking

- Under this, we have resource sharing and information dissemination.

d) Technical Communication

- Under this we have technical writing, editing, and desktop publishing.

Purpose of E-Library Management Systems

- E-Library Management Systems are for a variety of reasons, depending on the objectives, functions and environment of the organization. As a guide, the following are regarded as being pertinent:
- To furnish the much needed information on organizational manpower, which is useful for both internal and external management of the organization.

Purpose of E-Library Management Systems

- To provide accurate information, knowledge, potentials and opportunities.
- To generate information on resources and research.
- To furnish information on strengths and weaknesses, so that appropriate development schemes can be designed and implemented in a systematic fashion.
- To provide information on how best to conduct library activities.
- To generate information that will assist in determining advancement/promotion of knowledge and
- To provide factual data as a basis for decision-making.

Benefits of E-library Management System

The benefits of e-library management system include the provision of:

- online and offline storage,
- automated backups, and easy upgrades to simplify and enhance the learning process.
- increased Library engagement and avoid frustration and tediousness by providing clientele with 24/7 access to library resources from anywhere, anytime.

Benefits of E-library Management System Contd.

- The system is developed to give an improvement in control and performance in handling current issues and problems of library .
- The system can add user, validate user.
- It saves cost after system computerization is implemented. Less human force will be required to maintain the library thus reducing the overall cost.
- It saves time. Librarian is able to search record by using few clicks of mouse and few search keywords thus saving his valuable time.

Accessibility Of E-Library Management Systems

- **Normal User**

- For a normal user, *User Login* is required. This is the description feature of the user. This feature is used by the user to login into system. They are required to enter user *id* and *password* before they are allowed to enter the system.
- The user *id* and *password* will be verified and if user *id* is found invalid the user is not allowed to enter the system.
- Functional requirements
- user id is provided when they are registered
- The system must only allow user with valid *id* and *password* to enter the system.
- The system performs authorization process which decides what user level can have access to the system.
- The user must be able to logout after he or she has finished using system.

Register New Book

Description of feature

- This feature allows admin (Librarian) to add new books to the library.
- Functional requirements
- System must be able to verify information
- System must be able to enter number of copies into table.
- System must not allow two books to have same book id.

Search Book

- Description of Feature:
- This feature is found in book maintenance part .
- We can search books based on book id, book name , publication or by author name.
- Functional requirements:
- System must be able to search the database based on selected search type eg. Using title or author's name.
- System must be able to filter book based on keyword entered
- System must be able to show filtered books in table view

Issue Books and Return Books

- Description of Feature:
- This feature allows the issue and return of books and also view reports of book issued.
- Functional requirements:
- System must be able to enter issue information in database.
- System must be able to update number of books.
- System must be able to search if required books are available or not before issuing of the books
- System should be able to enter issue and return date information

Software Requirements And Tools Used

Some of the of software requirements and software tools used include:

Operating system

- Windows 7 is used as the operating system as it is stable and supports more features and is more user friendly.

Java Script

- JavaScript (JS) is a dynamic computer programming language.
- It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed.
- It is also being used in server-side programming, game development and the creation of desktop and mobile applications.
- JavaScript is a prototype-based scripting language with dynamic typing and has first-class functions.

Software Requirements And Tools Used

Contd.

MYSQL

- MySQL is used as database because it is easy to maintain and retrieve records by simple queries which are in English language and are easily understood and easy to write. It is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack (and other 'AMP' stacks). LAMP is an acronym for "Linux, Apache.
- MySQL is also used in many high-profile, large-scale websites, including Wikipedia, Google (though not for searches), Facebook, Twitter, Flickr, and YouTube.

Conclusion

- Library Management System, more popularly known as LMS, manages the resources in a library. It maintains up-to-date information and thus helps librarians focus on their jobs. Further, it is built to increase efficiency, save valuable administration time, and lead to a better educational experience.
- A well-chosen library management system software helps the library staff to keep track of different records. A librarian can determine:-
 1. Issue and Return Date
 2. Book catalogues with different genres
 3. Total books issued and
 4. Number of available books

THANK YOU